



Montana

Statewide

Dropout and Graduate Report
2006-07 School Year



Montana Office of Public Instruction
Linda McCulloch, Superintendent
www.opi.mt.gov

June 2008

Table of Contents

Introduction	2
The Impact of Dropping Out of School	2
Graduate and Dropout Definitions and Data Collections	3
Graduate Definitions and Data Collection	3
Dropout Definitions and Data Collection	3
Data Limitations	3
Analysis of Montana 2005-06 Dropout Rates	4
Calculating a Dropout Rate	4
2005-06 Montana Statewide Dropout Rate Summary	5
Dropout Rates for Disaggregated Student Populations	6
Dropout Rates by Gender	6
Dropout Rates by Race/Ethnicity Categories	8
Analysis of Dropout Rates by Race/Ethnicity Categories	8
A Closer Look at American Indian Dropout Rates	11
Dropout Rate by Size of District	14
Other Types of Dropout Indicators— The Completion and Graduation Rate	16
The Completion Rate	16
The Adequate Yearly Progress Graduation Rate	17
What Helps Prevent Students from Dropping Out?	18
Final Note	19
References	20
Additional Dropout Resources on the Web	20

Montana Statewide

This report was prepared by the Office of Public Instruction, Measurement & Accountability Unit.
Contact information can be obtained by calling Lindy Miller,
(406) 444-6774 or e-mail, lindmiller@mt.gov.

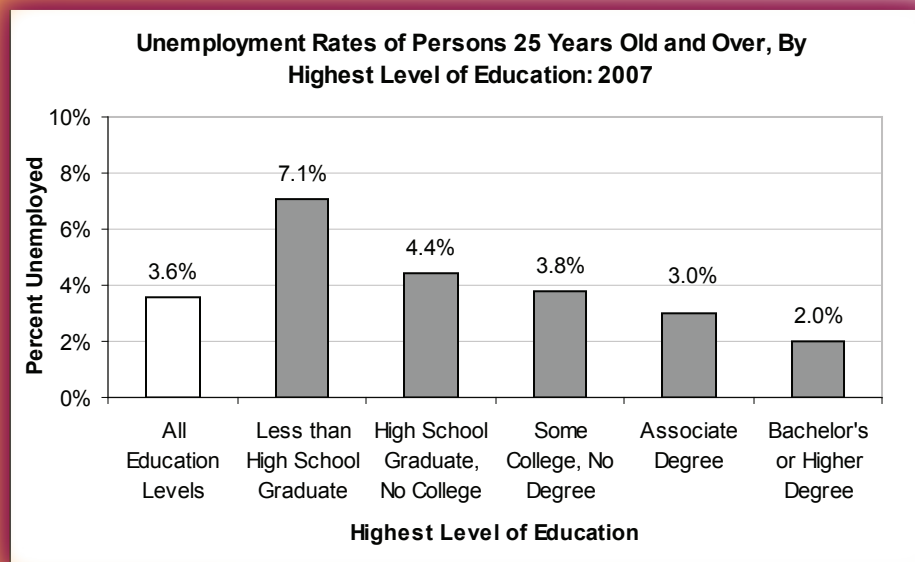


Introduction

The Montana School Accreditation Standards (10.55.603, ARM) require schools to do follow-up studies of graduates and students no longer in attendance. This report provides information on students who graduated or dropped out of Montana public, state-funded and nonpublic, accredited schools, during the 2006-07 school year.

The Impact of Dropping Out of School

Students who drop out of school face a bleak economic world to a much greater degree than youths in general. According to the Digest of Education Statistics, as of October 2004, 21 % of the 2003-04 dropouts were unemployed. By way of comparison, only 16 % of 2003-04 recent graduates not enrolled in college were unemployed. (NCES, 2005) As shown in the chart below, employment opportunities for high school dropouts continue to lag far behind their counterparts who attain a high school diploma or a college degree.



(Labor, 2007)

As recently as the 1970s, holding a high school diploma was considered an adequate, but not an essential, asset for entering the labor market. The technological advances of the last 30 years have fueled the demand for a more highly skilled work force. Employers increasingly require at least a high school diploma and look for employees with good communication, math and reading skills; computer skills; problem-solving and critical thinking; and the ability to work on a team. Dropouts who do manage to find employment can expect to earn approximately 28 % less than the average salary of a high school graduate. (NCES, 2005)

Dropouts are three times as likely as high school completers that do not go on to college to receive public assistance. (NCES, 1998) Approximately one-third of female dropouts are pregnant and facing child-rearing responsibilities without an education or job experience to support their children adequately. (NEGP, 2001) In addition to these grim economic statistics, dropouts also make up a disproportionate percentage of the prison population, comprising 26.5 % of federal prison population, 39.7 % of the state prison population, and 46.5 % of the local jail inmate population. (Justice, 2003) This is far costlier to both the individual and to society than a high school and/or college education.

Graduate and Dropout Definitions and Data Collections

Traditionally, each fall, schools report graduate data for all high schools and dropout data for grades 7 through 12 by gender and race/ethnicity categories for the previous school year. However, on January 8, 2002, President George Bush signed into law the reauthorization of the Elementary and Secondary Education Act (ESEA), otherwise known as the No Child Left Behind Act of 2001 (NCLB), which increases accountability for student academic achievement for all public schools. The Adequate Yearly Progress (AYP) of NCLB requires that public high and 7-8 schools disaggregate both dropout and graduate data not only by gender and race/ethnicity, but also by the following subgroups: economically disadvantaged, students with disabilities, limited English proficient, and migrant. In addition, public high schools must also report graduate data by whether or not graduates graduated “in the standard number of years” (i.e., “on-time”). A non-standard graduate is a student taking longer than 4 years to complete and does not have an IEP allowing for additional time.

Graduate Definitions and Data Collection

Montana accredited high schools report graduate numbers to the OPI each fall for the previous school year using the definition in the box to the right.

Dropout Definitions and Data Collection

Dropout rates can be calculated and reported in three different ways: event rates (snapshot of those who drop out in a single year), status rates (proportion of population who have not completed school and are not enrolled), and cohort rates (a more comprehensive picture which follows a sample group of students over time and generalizes their rate to a larger group). The collection method used in this report is an event rate adapted from the National Center for Education Statistics (NCES) at the U.S. Department of Education and is consistent with the requirements of the NCES Common Core of Data (CCD) reporting.

Data Limitations

Because the number of students enrolled for small schools and racial minority groups is relatively low, small annual changes in data can cause wide variations in annual completion, graduation, and dropout rates. For example, in a class with 10 students, one dropout would translate to a 10 % dropout rate.

Graduates are the count of individuals who:

- 1) completed the high school graduation requirements of a school district, including early graduates, during the previous school year,
or
- 2) completed the high school graduation requirements of a school district at the end of summer prior to the current school year.

General Education Development Test (GED) recipients **are not** counted as graduates.

Standard Number of Years (i.e., “On-time”) Graduate is an individual who:

- 1) completes a district’s graduation requirements in four years or less from the time an individual enrolled in the 9th grade,
or
- 2) has an Individualized Education Program (IEP) allowing for more than four years to graduate.

Dropouts are the count of individuals who:

- 1) were enrolled in school on the date of the previous year October enrollment count or at some time during the previous school year and were not enrolled on the date of the current school year October count,
or
- 2) were not enrolled at the beginning of the previous school year but were expected to enroll and did not re-enroll during the year (“no show”) and were not enrolled on the date of the current school year October count,
and
- 3) have not graduated from high school or completed a state or district-approved high school educational program,
and
- 4) have not transferred to another school, been temporarily absent due to a school-recognized illness or suspension, or died.

A more realistic indicator for small schools and racial minority groups is an average of several years. Montana has developed a student information system and is now able to track individuals across schools and school years. Only the 2006-07 data is from our student information system. All prior year's data is from an aggregate collection. This carries with it the risk of misclassification of student data (i.e., reporting a student's race/ethnicity inconsistently between enrollment and dropout data collections or reporting a transfer student as a dropout).

Analysis of Montana 2006-07 Dropout Rates

Calculating a Dropout Rate

Dropout rates are calculated by dividing the number of dropouts as defined above by the October enrollment total. Dropout rates vary for disaggregated student groups (i.e., race/ethnicity, gender). Calculating

and analyzing disaggregated dropout rates is key in determining if certain groups of students are more likely to drop out and can be used in developing and targeting dropout prevention efforts.

Dropout Rate Formula

Dropout Rate = Number of dropouts/October enrollment X 100

Example:

The 2006-07 Dropout Rate for Montana Accredited Schools =
1,896 Dropouts for grades 7 through 12 divided by 71,488 students
enrolled in October 2006 multiplied by 100 = 2.7%

2006-07 Montana Statewide Dropout Rate Summary

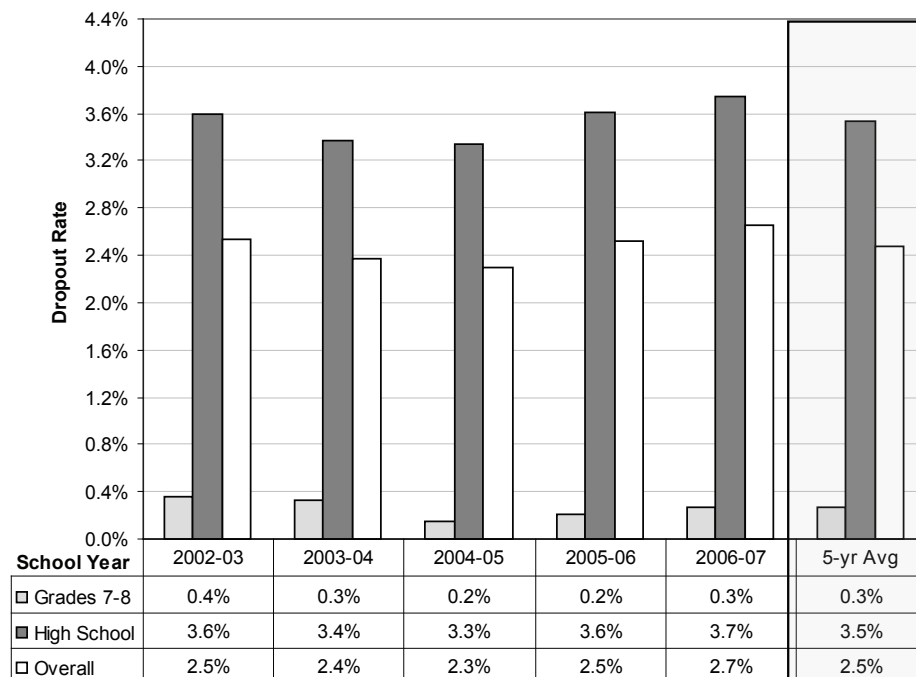
- ✓ Montana accredited schools reported that 1,896 students dropped out of grades 7 through 12 during the 2006-07 school year. The corresponding October enrollment was 71,488 yielding a dropout rate of 2.7 % for the 2006-07 school year (see Table 1 on following page).
 - The 2006-07 dropout rate for Montana grades 7 and 8 was relatively low (0.3 %), but represents 62 students leaving school.
 - The 2006-07 dropout rate for Montana high schools was 3.7 %.
- ✓ Peak dropout rates have traditionally been observed in 10th grade, when many students turn 16 and students can legally exit the school system. (Montana law states: "Except as provided in [Montana Code Annotated §20-5-102(2)], any parent, guardian, or other person who is responsible for the care of any child who is 7 years of age or older prior to the first day of school in any school fiscal year shall cause the child to be instructed in the program prescribed by the board of public education pursuant to 20-7-111 until the later of the following dates: (a) the child's 16th birthday; (b) the date of completion of the work of the 8th grade." Montana Code Annotated §20-5-102(1) (2001).) For the 2006-07 school year, however, peak dropout rates were observed in 11th grade with 12th grade not far behind.
- ✓ Males drop out of school at a higher rate than do females. Males represent 51 % of the total school enrollment for grades 7 through 12 and 57 % of the dropouts, whereas females represent 49 % of the total school enrollment for grades 7 through 12 and 43 % of the dropouts.
- ✓ For the 2006-07 school year, American Indian students represented 10.9 % of the total school enrollment for grades 7 through 12, but account for 21.3 % of the total dropouts.
 - The 2006-07 American Indian dropout rate for Montana grades 7 and 8 was 1.2 %.
 - The 2006-07 American Indian dropout rate for Montana high schools was 7.2 %.
 - The American Indian Dropout rate dropped by 0.6% while the dropout rate went up 0.2% for the White Race. The five year average stayed the same at 2.5 %.

Table 1
2006-07 Montana Dropout Rate Summary

	Dropout Rates	Dropout Count	Enrollment
Overall Total	2.7%	1,896	71,488
HS Total	3.7%	1,834	48,908
Gr 12	4.2%	465	11,202
Gr 11	4.3%	512	11,984
Gr 10	3.7%	459	12,355
Gr 9	2.6%	347	13,227
Ungraded* HS	36.4%	51	140
7 & 8 Total	0.3%	62	22,580
Gr 8	0.3%	30	11,398
Gr 7	0.3%	31	11,167
Ungraded* 7-8	6.7%	1	15
Gender			
Male	3.0%	1,089	36,692
Female	2.3%	807	34,796
Race/Ethnicity			
American Indian	5.2%	404	7,771
Asian	0.9%	7	753
Hispanic	4.4%	71	1,616
Black	3.1%	17	549
Pacific Islander	1.5%	2	133
White	2.3%	1,395	60,666

* "A class that is not organized on the basis of grade grouping and has no standard grade designation."
(NCES)

Figure 1: Montana Dropout Rates- 2002-03 to 2006-07



Dropout Rates for Student Subgroups

Since dropout rates can vary greatly between certain student populations, calculating and analyzing disaggregated dropout rates is key in developing and targeting dropout prevention strategies. The data collected by the OPI allows for analysis of dropout rates by grade, gender, race/ethnicity, and various types of schools.

Dropout Rates by Gender

In Montana schools, more males than females are enrolled at every grade level. For the 2006-07 school year, about 51 % of the total school enrollment for grades 7 through 12 was male and 49 % was female. Males have also traditionally had higher dropout rates than females for most grade levels.

Analysis of Dropout Rates by Gender

- ✓ Consistent with previous years, the 2006-07 dropout rate for grades 9 through 12 for males, 4.2%, was greater than for females, 3.2% (see Table 2).
- ✓ The 2006-07 dropout rate for grades 7 through 8 for males (0.3%) was the same for females. More females drop out at the 7-8 level than males.

Table 2
2006-07 Montana Dropout Rates by Grade and Gender

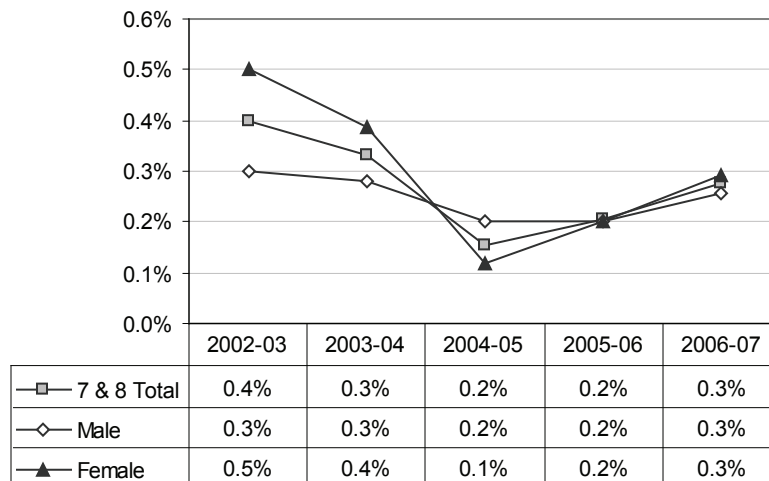
Grade	Dropout Rates			Dropout Count			Enrollment		
	Male	Female	Statewide	Male	Female	Statewide	Male	Female	Statewide
HS Total	4.2%	3.2%	3.7%	1,059	775	1,834	25,029	23,879	48,908
Grade 12	4.9%	3.4%	4.2%	279	186	465	5,683	5,519	11,202
Grade 11	4.9%	3.7%	4.3%	295	217	512	6,070	5,914	11,984
Grade 10	4.2%	3.2%	3.7%	268	191	459	6,347	6,008	12,355
Grade 9	2.8%	2.4%	2.6%	195	152	347	6,862	6,365	13,227
Ungraded* HS	32.8%	39.7%	36.4%	22	29	51	67	73	140
7 & 8 Total	0.3%	0.3%	0.3%	30	32	62	11,663	10,917	22,580
Grade 8	0.2%	0.3%	0.3%	13	17	30	5,885	5,513	11,398
Grade 7	0.3%	0.3%	0.3%	16	15	31	5,768	5,399	11,167
Ungraded* 7-8	10.0%	0.0%	6.7%	1	0	1	10	5	15
Overall Total	3.0%	2.3%	2.7%	1,089	807	1,896	36,692	34,796	71,488

- ✓ The male dropout rate increased 0.1% in grades 7-8 and 0.3% in grades 9-12. For females the dropout rate went up 0.1% in the grades 7-8 but decreased 0.1% in grades 9-12. Dropout Rates for males increased in all high school grades except for 9th, while they decreased for females in all grades except 10th. It is unclear at this time, however, whether this increase is due to improved dropout data collection procedures, including the new student information system (AIM) and increased emphasis placed on dropout data with regard to new federal accountability requirements for public high schools (see Table 3 and Figures 4 and 5 on the following page).

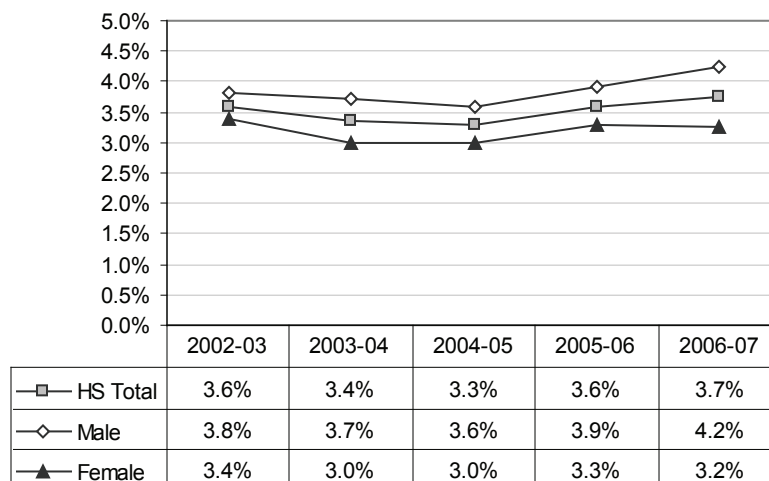
Table 3
Montana Dropout Rates by Grade Level and Gender for Five Years

	Dropout Rates						Dropout Count					
	2002-03	2003-04	2004-05	2005-06	2006-07	5-yr Avg	2002-03	2003-04	2004-05	2005-06	2006-07	5-yr Total
7 & 8 Total	0.4%	0.3%	0.2%	0.2%	0.3%	0.3%	90	81	37	48	62	318
Male	0.3%	0.3%	0.2%	0.2%	0.3%	0.2%	35	35	21	29	30	150
Female	0.5%	0.4%	0.1%	0.2%	0.3%	0.3%	55	46	16	19	32	168
HS Total	3.6%	3.4%	3.3%	3.6%	3.7%	3.5%	1,811	1,672	1,653	1,776	1,834	8,746
Male	3.8%	3.7%	3.6%	3.9%	4.2%	3.8%	991	952	919	984	1,059	4,905
Female	3.4%	3.0%	3.0%	3.3%	3.2%	3.2%	820	720	734	792	775	3,841
Overall Total	2.5%	2.4%	2.3%	2.5%	2.7%	2.5%	1,901	1,753	1,690	1,824	1,896	9,064
Male	2.7%	2.6%	2.5%	2.7%	3.0%	2.7%	1,026	987	940	1,013	1,089	5,055
Female	2.4%	2.1%	2.1%	2.3%	2.3%	2.3%	875	766	750	811	807	4,009

**Figure 4: Dropout Rates by Gender for Grades 7-8
2002-03 to 2006-07**

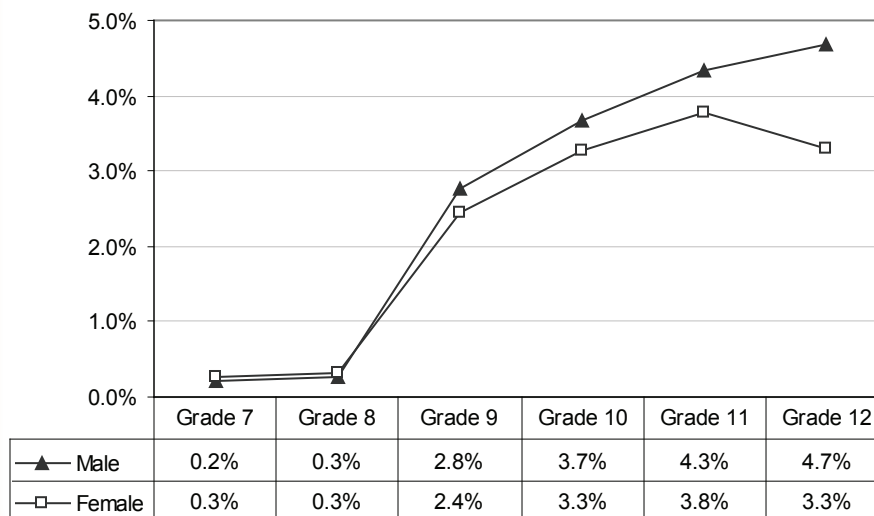


**Figure 5: Dropout Rates by Gender for Grades 9-12
2002-03 to 2006-07**



- ✓ As illustrated below in Figure 6, females drop out at a lower rate at every grade level than males except for the 7th grade.
- ✓ Peak dropout rates for females are observed in 11th grade and then decrease for 12th grade. Dropout rates for males, however, increase steadily through grade 12.

**Figure 6: Five-Year Dropout Rates by Gender and Grade
2002-03 to 2006-07**



Dropout Rates by Race/Ethnicity Categories

Dropout rates vary by race/ethnicity categories and for some minority groups are higher than the dropout rates for white students. For the 2006-07 school year, Montana school enrollment for grades 7 through 12 included 84.9% White students, 10.9% American Indians, 1.0% Asians, 2.2% Hispanics, 0.8% Blacks, and 0.2% Hawaiian/Pacific Islanders. Because the enrollment of some minority groups is low, annual dropout rates for these groups may vary widely from year to year. Averages of a period of years are more realistic indicators of the dropout rates.

Analysis of Dropout Rates by Race/Ethnicity Categories

- ✓ Consistent with previous years the 2006-07 dropout rate for the American Indian race/ethnicity category was greater than the statewide average and that of the “White” category (see Table 4).

**Table 4
2006-07 Montana Dropout Rates by Race/Ethnicity Categories**

	Dropout Rates			Dropout Count			Enrollment		
	Grades 7-8	Grades 9-12	Total	Grades 7-8	Grades 9-12	Total	Grades 7-8	Grades 9-12	Total
American Indian	1.2%	7.2%	5.2%	32	372	404	2,571	5,200	7,771
Asian	0.0%	1.3%	0.9%	0	7	7	201	552	753
Hispanic	0.2%	6.6%	4.4%	1	70	71	561	1,055	1,616
Black	0.0%	5.2%	3.1%	0	17	17	222	327	549
Pacific Islander	0.0%	2.4%	1.5%	0	2	2	50	83	133
White	0.2%	3.3%	2.3%	29	1,366	1,395	18,975	41,691	60,666
Overall	0.3%	3.7%	2.7%	62	1,834	1,896	22,580	48,908	71,488

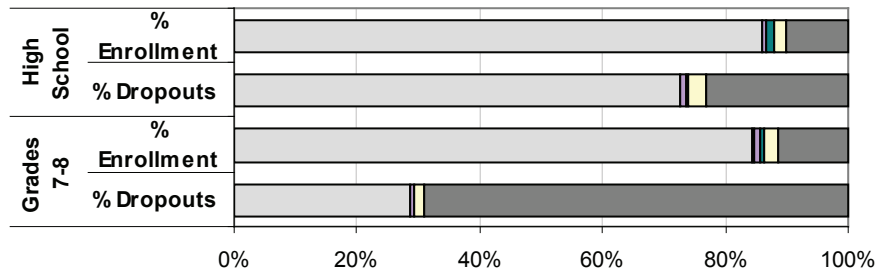
- ✓ For the 2006-07 school year the combined race/ethnicity categories of Asian, Hispanic, Black, and Pacific Islander only accounted for 97 dropouts from grades 7 through 12. The corresponding October enrollment was 3,051, yielding a dropout rate of 3.2%. Because the number of students enrolled for these race/ethnicity categories is low, annual dropout rates often vary widely from year to year, even when totaled at the state level. An average dropout rate utilizing dropout and enrollment data from multiple years is a more accurate indicator for these small groups (see Table 5).
- ✓ On average American Indian students drop out of grades 7 and 8 at a rate of 6 times that of white students and out of high school at a rate of more than 2 times that of white students.

Table 5
Montana Dropouts by Race/Ethnicity Categories for Five Years

Category	7 th & 8 th Grade Dropout Rates						High School Dropout Rates					
	2002-03	2003-04	2004-05	2005-06	2006-07	5-yr Avg	2002-03	2003-04	2004-05	2005-06	2006-07	5-yr Avg
American Indian	2.3%	2.2%	0.9%	1.3%	1.2%	1.6%	8.1%	8.1%	8.4%	8.2%	7.2%	8.0%
Asian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.8%	1.7%	1.1%	1.3%	1.4%
Hispanic	0.4%	0.2%	0.2%	0.0%	0.2%	0.2%	6.0%	5.1%	4.3%	5.2%	6.6%	5.4%
Black	0.0%	0.6%	0.0%	0.5%	0.0%	0.2%	3.8%	5.9%	2.2%	6.0%	5.2%	4.6%
Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	3.6%	3.0%	1.3%	2.4%	2.9%
All Minority	1.8%	1.7%	0.7%	1.0%	0.9%	1.2%	7.1%	7.1%	6.8%	7.0%	6.5%	6.9%
White	0.1%	0.1%	0.0%	0.1%	0.2%	0.1%	3.1%	2.8%	2.7%	3.0%	3.3%	3.0%
Statewide	0.4%	0.3%	0.2%	0.2%	0.3%	0.3%	3.6%	3.4%	3.3%	3.6%	3.7%	3.5%

- ✓ In the past five years, American Indians represented only 11.5% of the total school enrollment for grades 7 through 8, but accounted for 69.2% of the dropouts. For grades 9 through 12, American Indians represented 10.2% of the total school enrollment and 23.1% of the dropouts (see Figure 7).

**Figure 7: Dropout & Enrollment Percent by Race/Ethnicity Category.
Five Year Average 2001-02 to 2006-07.**



	Grades 7-8		High School	
	% Dropouts	% Enrollment	% Dropouts	% Enrollment
American Indian	69.2%	11.5%	23.1%	10.2%
Hispanic	1.6%	2.1%	3.0%	2.0%
Asian	0.0%	0.9%	0.4%	1.1%
Black	0.6%	0.8%	0.7%	0.6%
Pacific Islander	0.0%	0.2%	0.1%	0.1%
White	28.6%	84.6%	72.6%	86.1%

A Closer Look at American Indian Dropout Rates

- ✓ Montana has seven Indian reservations and one landless tribe, therefore the American Indian race/ethnicity category represents the largest minority group in the state.
- ✓ For the past few years, Montana high school dropout rates, including those for American Indians, have been on the decline. For the 2006-07 school year, American Indian dropout rates decreased at the 7-8 level and decreased at the high school level by a full percentage point. White dropout rates increased at both the 7-8 and the 9-12 levels during the 2006-07 school year.

Figure 8: Dropout Rates for Select Race/Ethnicity Categories for Grades 7-8 2002-03 to 2006-07

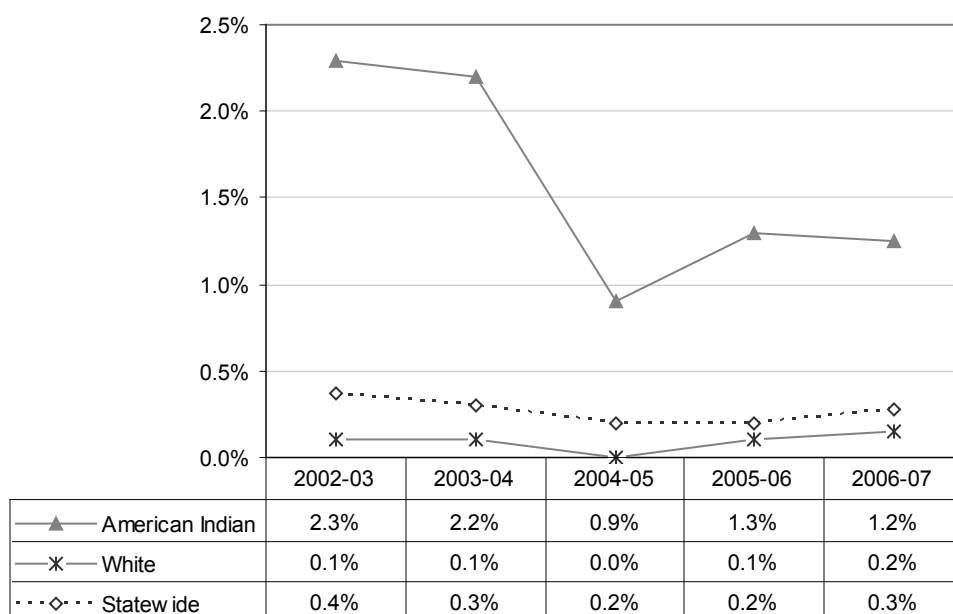
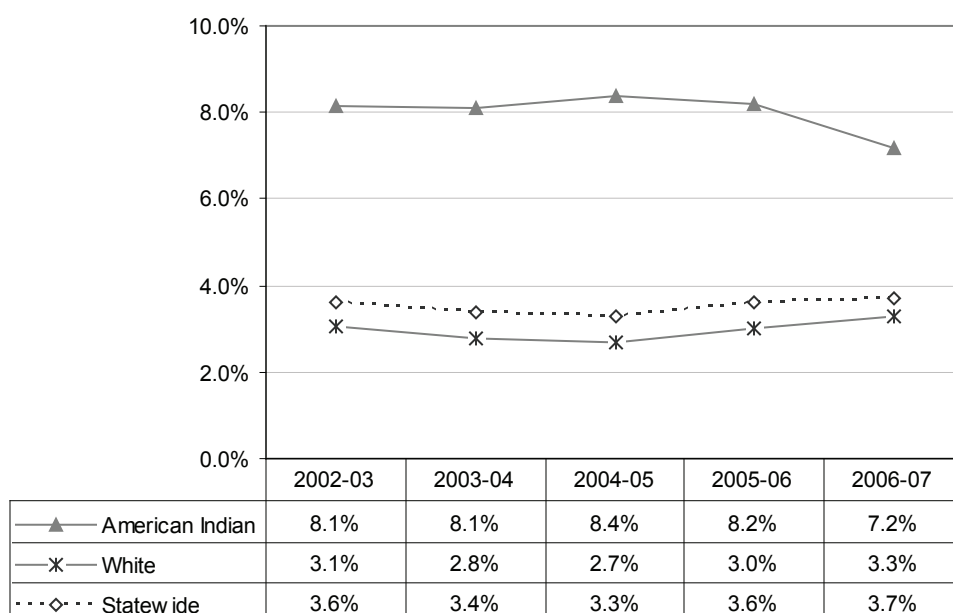
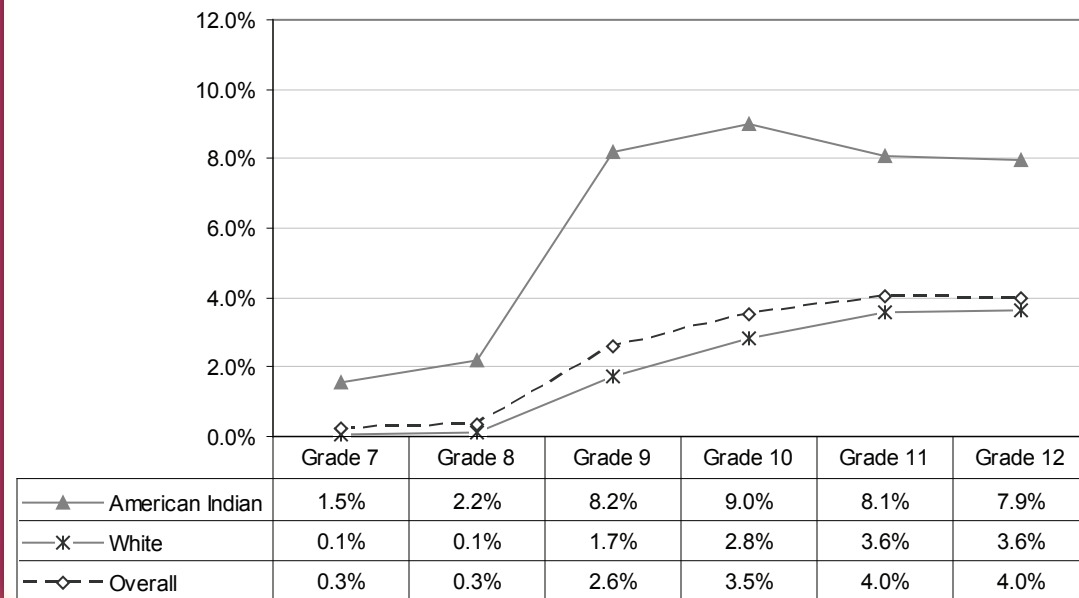


Figure 9: Dropout Rates for Select Race/Ethnicity Categories for Grades 9-12 2001-02 to 2006-07



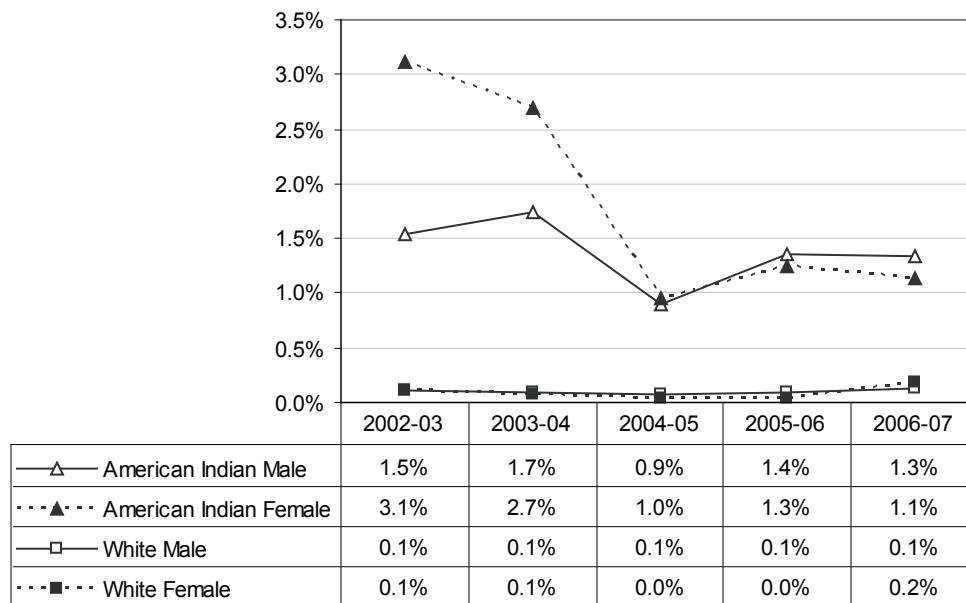
- ✓ As illustrated below in Figure 10, white students drop out at a much lower rate at every grade level than American Indian students. Peak dropout rates for Whites are observed around the 11th and 12th grades, whereas, dropout rates for American Indians peak a year earlier in grade 10. The highest number of American Indians dropout in the 9th and Whites in the 11th grade.

Figure 10: Five-Year Dropout Rates by Grade for Select Race/Ethnicity Categories 2001-02 to 2006-07

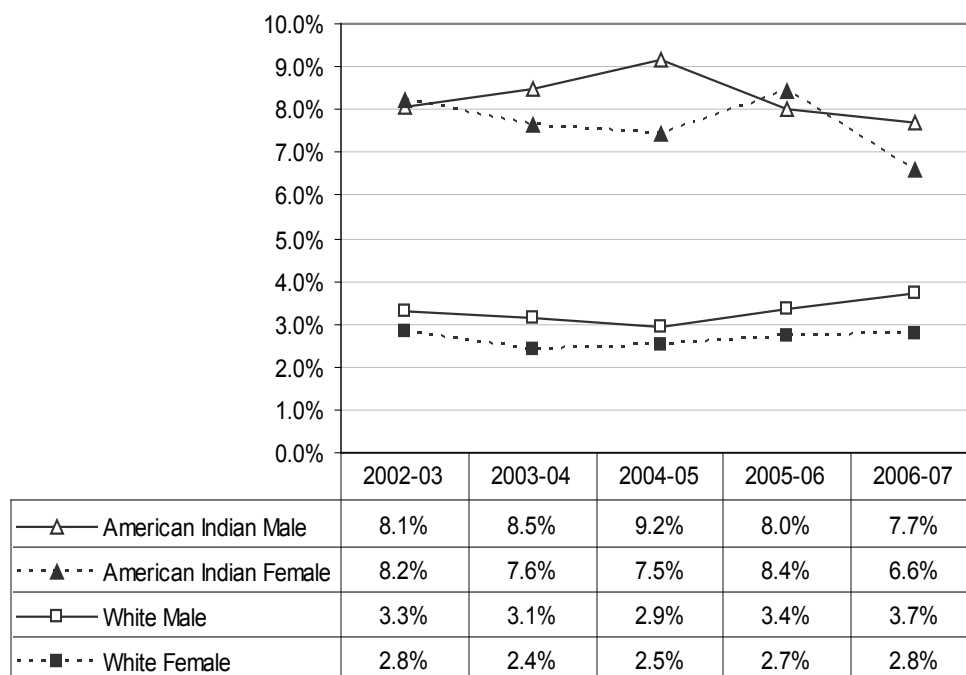


- ✓ Although, in general, males drop out of school at a higher rate than do females, this gender difference is not observed for the American Indian population at the grade 7-8 level. As illustrated in Figure 11, for the past five years, American Indian females have dropped out at a higher rate than males in three of the five years, with the two most recent years reversing the trend. In two of those years the gap was over one percentage point. Figure 12 shows that the 9-12 American Indian female dropout rate had been declining over the last five years, until the 2005-06 school year where it increased, followed by a decrease for the 2006-07 school year. The rate for American Indian males fluctuated over the past five years, decreasing during the 2006-07 school year.
- ✓ On the other hand, the dropout rates for Whites have stayed about the same with both genders showing an increase during the 2006-07 school year.

**Figure 11: Dropout Rates for Select Race/Ethnicity Categories by Gender for Grades 7-8
2002-03 to 2006-07**



**Figure 12: Dropout Rates for Select Race/Ethnicity Categories by Gender for Grades 9-12
2002-03 to 2006-07**



Dropout Rate by Size of District

For the purposes of comparing similarly sized school districts, Montana districts have been identified by size categories based on enrollment numbers.

Category- Elementary Enrollment	Category- High School Enrollment	Category- K-12 Districts
1E= more than 2,500 students	1H= more than 1,250 students	1K= 400 or more students
2E= 851 to 2,500 students	2H= 401 to 1,250 students	2K= 399 or fewer students
3E= 401 to 850 students	3H= 201 to 400 students	
4E= 151 to 400 students	4H= 76 to 200 students	
5E= 41 to 150 students	5H= 75 or fewer students	
6E= 40 or fewer students		

Analysis of Dropout Rates by School District Size

- ✓ The highest dropout rates for grades 7 through 8 are observed for 2E, enrollments between 851 to 1,250 students, and 3E districts with enrollments between 401 and 850 students.
- ✓ As illustrated in Table 6, on average at the high school level, smaller school districts have lower dropout rates than do larger districts, with the highest dropout rates being observed for 1H districts, enrollments larger than 1,250 students.
- ✓ The above trend is not observed when data are disaggregated by race/ethnicity. Unlike the “White” race/ethnicity category, American Indian dropout rates at the high school level remain consistently high amongst the various district size categories (see Figure 16 on following page), with the dropout rates being highest at 1H districts. American Indian dropout rate for the smallest high schools, 5H, is noticeably smaller than other size categories but still higher than the dropout rate for Whites in the same size category.
- ✓ For the past five years, the 1H dropout rate for American Indian students is 2.9 percentage points higher than at 2H districts.
- ✓ Much of the improvement in the American Indian, high school, dropout rate occurred in the 2H, 1K and 4H size categories. The 2H size category improved from 8.4 to 8.0%, 4.8% to 4.0% in 1K, and 8.3% to 6.9% in 4H. It is the 4H size category that has the highest percentage of American Indian students at 22.7%.
- ✓ The 2E, American Indian dropout rate, at the grade 7/8 schools, improved from 3.1% to 2.4%.
- ✓ For White students, even though the high school dropout rate has increased this year, the 5 years average has stayed the same for every size category.

Table 6
Montana Dropout Rate by School District Size

Level	1E,1H	2E,2H	3E,3H	4E,4H	5E,5H	6E	1K	2K	All Schools
<u>7/8 dropouts</u>									
2006-07 rate	0.1%	0.2%	0.8%	0.2%	0.2%	0.8%	0.2%	0.3%	0.3%
2005-06 rate	0.1%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%
2004-05 rate	0.1%	0.1%	0.5%	0.1%	0.1%	0.0%	0.0%	0.2%	0.2%
2003-04 rate	0.2%	0.7%	0.7%	0.1%	0.0%	0.0%	0.1%	0.4%	0.3%
2002-03 rate	0.1%	0.9%	0.7%	0.1%	0.1%	0.0%	0.3%	0.4%	0.4%
5-yr average rate	0.2%	0.5%	0.6%	0.1%	0.1%	0.2%	0.1%	0.3%	0.3%
<u>HS dropouts</u>									
2006-07 rate	4.5%	4.4%	3.6%	2.2%	1.9%	NA	2.2%	2.0%	3.7%
2005-06 rate	4.4%	4.3%	2.9%	2.4%	0.7%	NA	2.4%	1.9%	3.6%
2004-05 rate	3.4%	4.6%	3.5%	2.7%	0.7%	NA	3.1%	1.7%	3.3%
2003-04 rate	3.6%	3.5%	3.7%	3.0%	2.4%	NA	3.5%	1.5%	3.4%
2002-03 rate	3.9%	4.2%	4.2%	2.9%	0.6%	NA	2.7%	1.9%	3.6%
5-yr average rate	3.8%	4.2%	3.6%	2.8%	1.1%	NA	2.9%	1.8%	3.5%

Figure 15: Five-Year Dropout Rates by District Size Category for Select Race/Ethnicity Categories for Grades 7-8 2002-03 to 2006-07

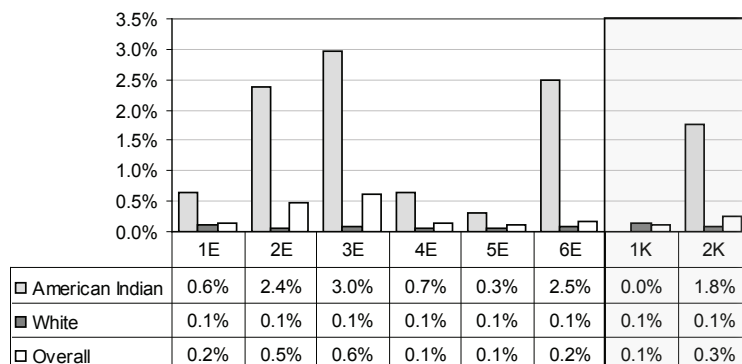
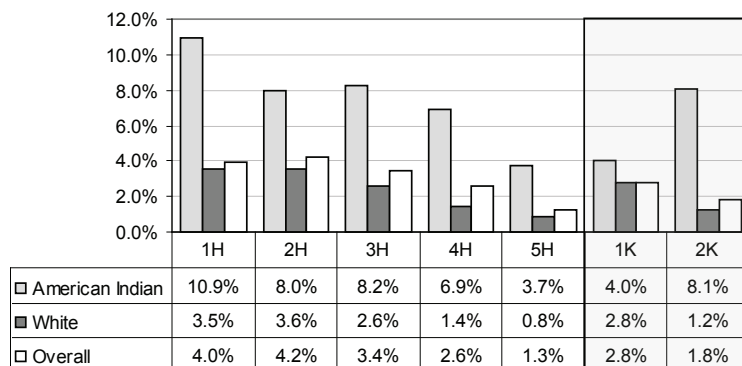


Figure 16: Five-Year Dropout Rates by District Size Category for Select Race/Ethnicity Categories for Grades 9-12 2002-03 to 2006-07



Other Types of Dropout Indicators- The Completion and Graduation Rate

The dropout rates identified thus far in this report are annual snapshots of grade-by-grade dropouts. The dropout data used to calculate those annual rates can be used in conjunction with graduate data to build a synthetic high school completion rate or “on-time” graduation rate for a specific class of students, even though each student is not followed through high school.

The Completion Rate

The National Center for Education Statistics (NCES) developed a formula as a practical way to calculate a completion rate after studying a variety of calculation methods. This estimated cohort method utilizes both dropout and graduate data and can be calculated for all accredited schools, but requires data from four consecutive years.

Completion Rate Formula

$$\text{Completion Rate} = \frac{c_t}{c_t + d_t^{12} + d_{(t-1)}^{11} + d_{(t-2)}^{10} + d_{(t-3)}^9}$$

Where:

c = number of graduates receiving a high school diploma in 4 years + nonstandard graduates + GED recipients through a school district administered program

t = year of graduation

d = dropouts

12, 11, 10, 9 = class level

Example:

The 2006-07 Completion Rate for Montana High Schools = 10,126 Graduates for Class of 2007 divided by (1,683 students dropped out over four years plus 10,126 Graduates for the Class of 2007) multiplied by 100 = 85.7 %

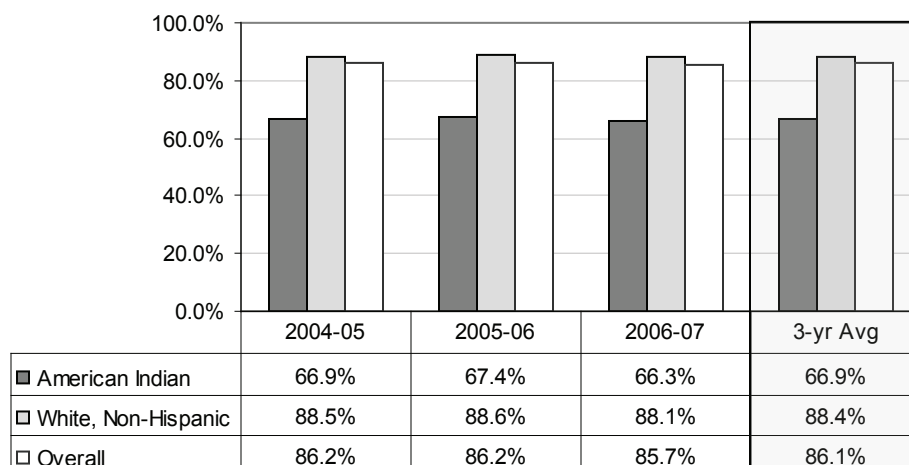
Analysis of Completion Rates

- ✓ The overall completion rate for the Class of 2007 was 85.7% (see Table 7 below).
- ✓ For the Class of 2007, females had a higher completion rate (87.2%) than males (84.4%).
- ✓ The race/ethnicity categories of Asian, Hispanic, Black, and Pacific Islander only accounted for 3.9% of the 2006-07 graduates and 4.4% of the dropouts over four years. Therefore, as with dropout rates, the completion rates for these race/ethnicity categories tend to vary widely from year to year.
- ✓ The Class of 2007 completion rate for the American Indian race/ethnicity category was considerably lower than the statewide completion rate and that of the White category.
- ✓ As illustrated on the following page in Figure 17, American Indian students had a three-year average completion rate of 66.9%, noticeably lower than the White average of 88.4 %.
- ✓ Completion rates for American Indian students have decreased this year after increasing for several years. Decreased completion rates were also observed for white students for 2006-07.

Table 7
2006-07 Montana Completion Rate Summary

	Dropouts					Graduates 2006-07	Completion Rate
	Grade 9 2003-04	Grade 10 2004-05	Grade 11 2005-06	Grade 12 2006-07	4-yr Dropout Total		
Overall Total	314	410	494	465	1,683	10,126	85.7%
Gender							
Male	175	212	273	279	939	5,065	84.4%
Female	139	198	221	186	744	5,061	87.2%
Race/Ethnicity							
American Indian	131	115	88	66	400	786	66.3%
Asian	1	2	3	4	10	128	92.8%
Hispanic	12	11	11	12	46	206	81.7%
Black	4	4	4	3	15	49	76.6%
Pacific Islander	1	1	0	1	3	16	84.2%
White	165	277	388	379	1,209	8,941	88.1%

Figure 17: Montana Completion Rates- 2004-05 to 2006-07



The Adequate Yearly Progress Graduation Rate

Graduation rate, defined as “the percentage of students who graduate from secondary school with a regular diploma in the standard number of years” (i.e., “on-time”), is the required additional indicator for public high schools in AYP determinations. Montana’s U.S. Department of Education-approved high school graduation rate is an estimated cohort group rate based on the method recommended by the NCES. Public high schools must have a graduation rate for the “All Students Combined” subgroup of at least 80% or make improvement towards this goal to meet this indicator. Montana’s graduation rate is calculated using the formula in the box to the right.

AYP Graduation Rate Formula

$$\text{Graduation Rate} = \frac{g_t}{c_t + g_t + d_{t-1}^{12} + d_{(t-1)}^{11} + d_{(t-2)}^{10} + d_{(t-3)}^9}$$

Where:

g = number of graduates receiving a standard high school diploma in four years or less (from the time enrolled in the 9th grade) or had an IEP allowing for more than four years to graduate.

c = completers of high school by other means

t = year of graduation

d = dropouts

12, 11, 10, 9 = class level

Example:

The 2006-07 Graduation Rate for Montana Public High Schools = 10,006 “On-time” Graduates for Class of 2006 divided by (1,664 students dropped out over four years plus 116 Not “On-time” Graduates for the Class of 2007 plus 10,006 “On-time” Graduates for the Class of 2007) multiplied by 100 = 84.9 %

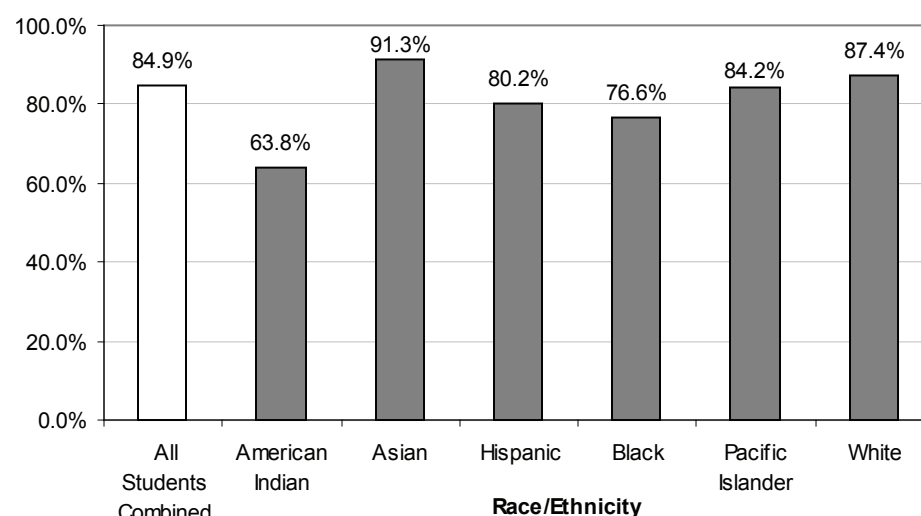
Analysis of AYP Graduation Rates

- ✓ The Class of 2007 AYP Graduation Rate for “All Students Combined” was 84.9% (see Table 8 and Figure 18 on following page).
- ✓ Disaggregated graduation rates are not used for determinations on this indicator; however, for the Class of 2007 the American Indian graduation rate was considerably lower than any of the subgroups. Therefore, schools with predominantly American Indian enrollment may find it more difficult to meet the 80% percent goal.
- ✓ Although graduate and dropout data for the 2006-07 school year has been collected by the OPI, individual school and district AYP determinations, which use these data for the 2007-08 school year, will not be made until August of 2008.

Table 8
Montana Public High School AYP Graduation Rate for the Class of 2007

Subgroups	Dropouts					Graduates 2006-07		AYP Graduation Rate
	Grade 9 2003-04	Grade 10 2004-05	Grade 11 2005-06	Grade 12 2006-07	4-yr Dropout Total	Not On-time or GED	On-time	
All Students Combined	309	401	489	465	1,664	116	10,006	84.9%
American Indian	126	109	84	66	385	39	747	63.8%
Asian	1	2	3	4	10	2	126	91.3%
Hispanic	12	11	11	12	46	4	202	80.2%
Black	4	4	4	3	15	0	49	76.6%
Pacific Islander	1	1	0	1	3	0	16	84.2%
White	165	274	387	379	1,205	71	8,866	87.4%

Figure 18: Montana Public High School AYP Graduation Rates for All Students Combined and Race/Ethnicity (School Year 2006-07)



What Helps Prevent Students from Dropping Out?

Several studies have identified effective strategies to prevent students from leaving high school before receiving a diploma (NEGP, 2000). Some of those strategies include:

- Providing intensive intervention through smaller alternative middle and high schools.
- Focusing on changing the classroom experience through professional development to improve curriculum and instruction rather than focusing on dropout prevention services.
- Mentoring and tutoring by supportive adults and peers.
- Evaluating the impact of policies, practices, and structures on all students.
- Providing collective support to school and student needs through community and family collaboration.

Final Note

Policy implications that were identified by research studies as critical to the effectiveness of dropout intervention strategies included:

- The choice of teachers is more important than the choice of curriculum.
- The high school level may be too late to begin implementing intervention strategies.
- Data is needed to design appropriate strategies to prevent students from dropping out (NEGP, 2000).

The goal of gathering dropout information is to identify where and when students drop out of school and to use this knowledge to help keep students in school.

References

- Lewis, Anne C. (2000). Dropouts from the K-12 public school system. *The NEGP Monthly*, Vol. 2, No. 19 (p. 1-2). August, 2000. Retrieved February 5, 2004, <http://www.negp.gov/issues/issu/monthly/0800.pdf>
- Lewis, Anne C. (2001). Graduation rates up, down, and all around the issues. *The NEGP Monthly*, Vol. 2, No. 25 (pp. 1). February, 2001. Retrieved February 5, 2004, <http://www.negp.gov/issues/issu/monthly/0201.pdf>
- Montana Office of Public Instruction. *Montana Graduate and Dropout Data Collection Handbook*, (p.i), September 2006, <http://www.opi.mt.gov/PDF/ADC/FY07/MTHSComDropoutManual.pdf>
- U.S. Department of Education, National Center for Education Statistics (1998). The Condition of Education 1998, (NCES Publication No. 98-013), by John Wirt, Tom Snyder, Jennifer Sable, Susan Choy, Yupin Bae, Janis Stennett, Allison Gruner, and Marianne Perie. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education, National Center for Education Statistics. (2005). Digest of Education Statistics, 2004, (NCES Publication No. 2005-034), by Thomas D. Snyder and Charlene M. Hoffman. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Justice, Office of Justice Statistics. (2003, January). Education and Correctional Populations, (NCJ Publication No. 195670). Retrieved February 5, 2004, <http://www.ojp.usdoj.gov/bjs/pub/pdf/ecp.pdf>
- U.S. Department of Labor, Bureau of Labor Statistics. (2007). Current Population Survey. Annual Average Data. Employment Status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic origin. Retrieved April 18, 2008, <http://www.bls.gov/cps/cpsaat7.pdf>

Additional Dropout Resources on the Web

- National Center for Education Statistics-** <http://www.nces.ed.gov/>
- National Dropout Prevention Center/Network-** <http://www.dropoutprevention.org/>
- U. S. Census Bureau-** <http://www.census.gov/index.html>

Montana Statewide

Dropout and Graduate Report
2006-07 School Year



*Montana Office of Public Instruction
Linda McCulloch, Superintendent
www.opi.mt.gov*